Complete Summary

GUIDELINE TITLE

Surgical treatment of esophageal cancer.

BIBLIOGRAPHIC SOURCE(S)

Society for Surgery of the Alimentary Tract (SSAT). Surgical treatment of esophageal cancer. Manchester (MA): Society for Surgery of the Alimentary Tract (SSAT); 2002. 3 p.

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Esophageal cancer

GUIDELINE CATEGORY

Diagnosis
Management
Treatment

CLINICAL SPECIALTY

Family Practice
Gastroenterology

Internal Medicine
Surgery

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To guide primary care physicians to the appropriate utilization of surgical procedures on the alimentary tract or related organs

TARGET POPULATION

Patients with esophageal cancer

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis and Staging

1. Assessment of symptoms (e.g., dysphagia)
2. Physical examination
3. Endoscopic biopsy
4. Computed tomography scans of the chest and abdomen to search for metastatic disease
5. Endoscopic ultrasound

Treatment

1. Esophagectomy
2. Chemotherapy or radiotherapy (adjuvant or neoadjuvant)
3. Endoscopically inserted stent as palliative measure

MAJOR OUTCOMES CONSIDERED

- Average hospital stay
- Survival
- Relief of dysphagia
- Surgical morbidity and mortality rates

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The Society for Surgery of the Alimentary Tract (SSAT) guidelines are based on statements and recommendations that were overwhelmingly supported by clinical evidence. Each represents a consensus of opinion and is considered a reasonable plan for a specific clinical condition.

(See companion document Gadacz TR, Traverso LW, Fried GM, Stabile B, Levine BA. Practice guidelines for patients with gastrointestinal surgical diseases. J Gastrointest Surg 1998;2:483-484.)

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The guidelines were reviewed by several committee members and then by the entire committee on several occasions. Each guideline was then sent back to the original author for final comment and reviewed again by the committee. Each guideline was approved by the Board of Trustees of the Society for Surgery of the Alimentary Tract and final comments were reviewed by the committee.

(See companion document Gadacz TR, Traverso LW, Fried GM, Stabile B, Levine BA. Practice guidelines for patients with gastrointestinal surgical diseases. J Gastrointest Surg 1998;2:483-484.)

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Symptoms and Diagnosis

Dysphagia is the most common presenting symptom. Usually patients present with a history of progressive dysphagia, starting with hard solid foods (i.e. meats and bread) and progressing to softer foods and liquids. Odynophagia, regurgitation and weight loss are also commonly described in advanced cases. Local tumor extension invading into the tracheobronchial tree or recurrent laryngeal nerves can result in stridor, cough, choking, aspiration pneumonia and hoarseness. Physical exam is usually normal, but may reveal signs of generalized wasting as a consequence of poor nutrition or metastatic disease. Tumors are now being increasingly diagnosed in asymptomatic patients with Barrett's esophagus followed within programs of surveillance endoscopy.

A systemic approach to the diagnosis and staging of esophageal cancer is mandatory. Once a histologic diagnosis of esophageal carcinoma has been confirmed by endoscopic biopsy, a detailed evaluation of the local, regional and metastatic extent of the disease is performed (staging). Computed tomography (CT) scans of the chest and abdomen are useful to search for metastatic disease. Endoscopic ultrasound may be useful to evaluate depth of tumor invasion and regional nodal involvement. Its accuracy is approximately 80-85% for tumor depth and 70-75% for nodal status. Accurate staging prior to treatment is important not only for survival analyses, but also for clinical decision-making.

Treatment

Treatment may be either curative or palliative, depending on the stage of the disease and the patient's condition. Curative treatment is most applicable to early lesions. If the lymph node spread is limited, even moderately advanced tumors may be cured by surgery. The earliest forms of cancer - high grade dysplasia and cancer contained within the mucosa - may be treated by a limited esophagectomy with a high expectation of cure. Therapies directed at ablating the mucosa endoscopically for early cancer are still experimental. For more advanced but still potentially curable cancers, five year survival rates as high as 41% have been reported. Two recent studies have reported that even for patients with stage III disease, long-term survival can be achieved in 25-35% of patients following

esophagectomy. Esophagectomy can be performed by either transthoracic or transhiatal approaches. Morbidity and mortality rates are now less than 10% as a result of improvements in surgical technique and perioperative care.

The addition of chemotherapy or radiotherapy after operation (adjuvant therapy) has not been shown to be beneficial. The preoperative administration of chemotherapy and radiation (neo-adjuvant therapy) is gaining in popularity, and may possibly be superior to surgery alone but the evidence is not strong and the morbidity of the surgery may be increased by the preoperative therapy. In patients with advanced cancers, the disease is essentially incurable and the focus shifts towards palliation. If the tumor is resectable the best palliation is generally obtained by surgery. In unresectable tumors or where distant metastases are present, the survival is much shorter and excisional surgery is rarely justified. Dysphagia is fairly well palliated by a stent inserted endoscopically.

Qualifications of Personnel Providing Care or Surgery

The qualifications of a surgeon to perform any operative procedure should be based on education, training, experience, and outcomes. At a minimum, the surgical treatment of esophageal metaplasia and cancer should be performed by surgeons who are certified or eligible for certification by the American Board of Surgery, the Royal College of Physicians and Surgeons of Canada, or the equivalent.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Two recent studies have reported that even for patients with stage III disease, long-term survival can be achieved in 25-35% of patients following esophagectomy.
- Palliative resection provides relief of dysphagia in 90% of patients.

POTENTIAL HARMS

The mortality rate of esophagectomy is 5 to 10% in specialized units. Data suggest that esophagectomy is most safely performed in high volume units. The most common complications are pulmonary (10 to 50%), cardiac dysrhythmias (10%), and anastomotic leak (5 to 10%). When the anastomosis is made in the

neck, a leak is rarely the cause of serious morbidity. Dissection in the neck however does carry the potential risk of temporary or even permanent recurrent laryngeal nerve injury.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

These guidelines have been written by the Patient Care Committee of the Society for Surgery of the Alimentary Tract (SSAT). Their goal is to guide primary care physicians to the appropriate utilization of surgical procedures on the alimentary tract or related organs and they are based on critical review of the literature and expert opinion. Both of the latter sources of information result in a consensus that is recorded in the form of these Guidelines. The consensus addresses the range of acceptable clinical practice and should not be construed as a standard of care. These Guidelines require periodic revision to ensure that clinicians utilize procedures appropriately, but the reader must realize that clinical judgment may justify a course of action outside of the recommendations contained herein.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

End of Life Care
Living with Illness

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Society for Surgery of the Alimentary Tract (SSAT). Surgical treatment of esophageal cancer. Manchester (MA): Society for Surgery of the Alimentary Tract (SSAT); 2002. 3 p.

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2002 Oct 7

GUIDELINE DEVELOPER(S)

Society for Surgery of the Alimentary Tract, Inc - Medical Specialty Society

SOURCE(S) OF FUNDING

Society of Surgery of the Alimentary Tract, Inc.

GUIDELINE COMMITTEE

Patient Care Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available from the Society for Surgery of the Alimentary Tract, Inc. Web site.

Print copies: Available from the Society for Surgery of the Alimentary Tract, Inc., 900 Cummings Center, Suite 221-U, Beverly, MA 01915; Telephone: (978) 927-8330; Fax: (978) 524-0461.

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Gadacz TR, Traverso LW, Fried GM, Stabile B, Levine BA. Practice guidelines for patients with gastrointestinal surgical diseases. J Gastrointest Surg 1998;2:483-484.

Electronic copies: Not available at this time.

Print copies: Available from the Society for Surgery of the Alimentary Tract, Inc., 900 Cummings Center, Suite 221-0, Beverly, MA 01915; Telephone: (978) 927-8330; Fax: (978) 524-8890.

PATIENT RESOURCES

None available

NGC STATUS

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